October 2002 Cost figures as of: February 2023



# Lake Salvador Shore Protection Demonstration (BA-15)

### **Project Status**

**Approved Date:** 1993 **Project Area:** N/A **Approved Funds:** \$2.80 M **Total Est. Cost:** \$2.80 M

**Net Benefit After 20 Years:** N/A **Status:** Completed June 1998

**Project Type:** Demonstration: Shoreline Protection

**PPL#:** 3

#### Location

The project is located on the southwest end of Lake Salvador near Des Allemands in St. Charles Parish, Louisiana. It encompasses approximately 1,200 acres.

#### **Problems**

The Lake Salvador area has experienced high rates of land loss caused by a documented shoreline erosion rate (1953-83) that averaged 13 feet per year. This chronic erosion has breached the lake shoreline in several locations, exposing fragile, highly organic marsh substrates to increased wave and tidal energy.

#### **Restoration Strategy**

Phase 1 of the project tested four types of shoreline protection structures along a section of the northern lakeshore to determine their effectiveness in reducing shoreline erosion.

To the south, Phase 2 constructed a 9,000 foot rock shoreline stabilization structure along a section of the western lakeshore to protect the shoreline and adjacent marsh from wave-induced erosion.

### **Progress to Date**

Monitoring of the Phase 1 area indicated that none of the tested designs showed a reduction in shoreline erosion rates; however, the demonstration was helpful in determining the relative stability of the tested structures and therefore their possible use (or application) for shorelines that cannot be protected with rock.

The phase 2 structure (rock) has successfully reduced the shoreline erosion rate. Monitoring has indicated not only a halt in erosion, but a shoreline gain of 1.8 feet per year. This project is on Priority Project List 3.



Installation of an erosion control structure during Phase 1 of the Lake Salvador restoration project.



Phase 2 of the Lake Salvador restoration project. The rock structure shown was installed to help stabilize the shoreline, allow sediment trapping, and promote marsh development.

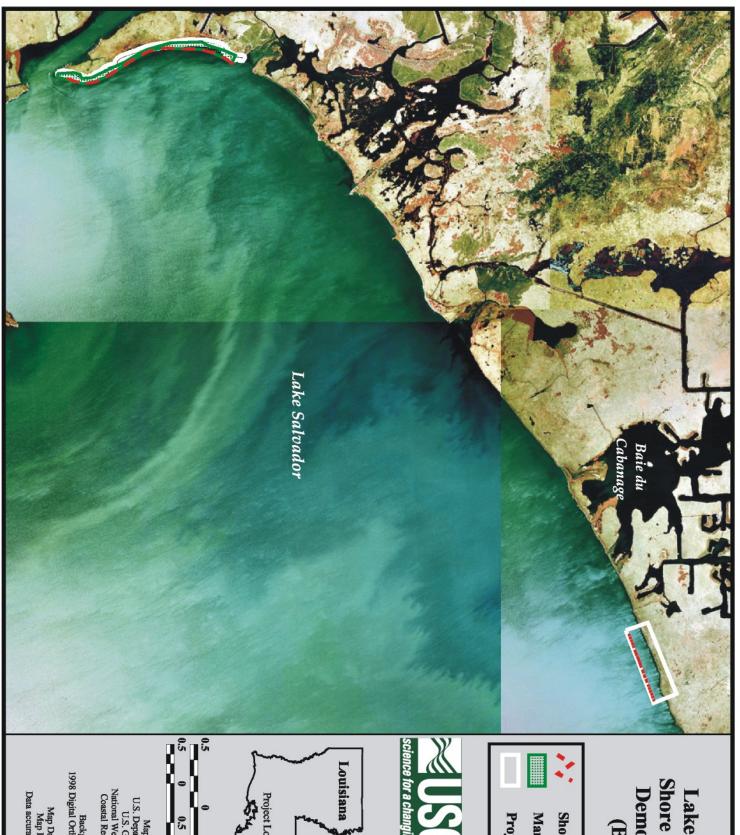
 $For \ more \ project \ information, \ please \ contact:$ 



#### Federal Sponsor: National Marine Fisheries Service Baton Rouge, LA (225) 389-0508



**Local Sponsor:**Coastal Protection and Restoration Authority Baton Rouge, LA (225) 342-4736



## **Shore Protection** Demonstration (BA-15) Lake Salvador

**Marsh Creation Area Shoreline Protection** 







	Miles	
	_	
Kilometers	0.5	from .
		Location
0.5	0	Project Location
0		
12.0	5	man and

Map Produced By:
U.S. Department of the Interior
U.S. Geological Survey
National Wetlands Research Center
Coastal Restoration Field Station

Background Imagery: 1998 Digital Orthophoto Quarter Quadrangle

Map Date: June 10, 2002 Map ID: 2002-11-441 Data accurate as of: June 10, 2002